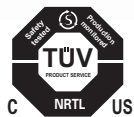




ELECTRONIC AIR PURIFIER

OPERATION MANUAL

Model No. SOTO-AE/Code 300T



ERI JU07655-7001

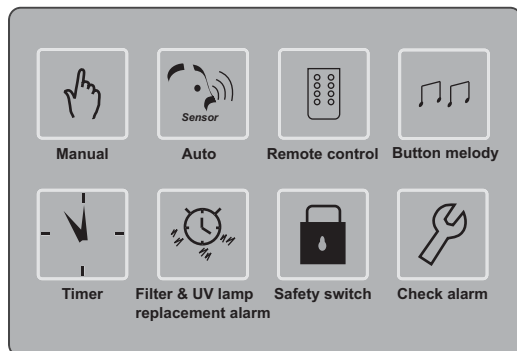
ISO 9001:2008



WARNING

- Before operating the system, please read this manual thoroughly, and retain it for future reference.
- This unit cannot be used in atmosphere containing explosive dust, gas or oxygen, or in an area where flammable dust is present.
If so, it may result in explosion or fire!
- This product can be used only where the power supply is 220V/50Hz. You cannot use the unit if the power voltage is different.

ENGLISH



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**BEFORE OPERATING,
READ ALL INSTRUCTIONS IN
THIS MANUAL CAREFULLY.**

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FOR CUSTOMER ASSISTANCE

If you have questions about your air purifier, call the customer service number. Before calling, please note the model and serial number located on the back of the unit and fill in the following information below. This information will help us answer your questions much more quickly.

Model number

Serial number

Date of purchase

Dealer name

Address

City

Province

Postal code

Telephone

Phone: (86-10) 8449-1978

Write: For service problems, guarantee information, missing items and other assistance:

BEIJING SOTO CORPORATION

Huguzhuang, Lucheng Town, Tongzhou District,
Beijing 101117, China.

Please provide the following information when you write or call:
model number, serial number, date of purchase, your complete
mailing address (including Postal Code), your daytime telephone
number (including area code) and description of the problem.

ENGLISH

CONSUMER LIMITED WARRANTY

BEIJING SOTO CORPORATION *LIMITED WARRANTY* Congratulations on your investment

Beijing Soto Corporation (Herein after called SOTO) gives you the following limited warranty for this product only if it was originally purchased from Soto or from an authorized dealer.

SOTO warrants that this product is free, under normal use and maintenance, from any defects in material and workmanship. If any such defects should be found in this product within the applicable warranty period. SOTO shall, at its option, repair or replace the product as specified herein.

SOTO will repair or replace, free of charge, to the original purchaser, any part that is found to be defective in material or workmanship within one (1) year of the date of purchase. This limited warranty does not cover the replacement of expendable or consumable parts such as filters, and other parts subject to normal wear unless they are defective in material or workmanship.

This warranty shall not apply if:

- (A) Any defects caused or repairs required because of abusive operation, negligence, accident, improper installation or inappropriate use as outlined in the operation manual.
- (B) Any product tampered with modified, adjusted or repaired by any party other than SOTO, SOTO Authorized Service Centers or Dealers.
- (C) Damaged caused or repairs because of the use with items not specified or approved by SOTO.
- (D) Any damage caused by external or environmental conditions, including but not limited to the use of voltage other than indicated on the product.

Beijing Soto Corporation's limited warranty is valid only if you retain proof of purchase from SOTO or a SOTO Authorized Retail Dealer for this product.

ENGLISH

To obtain the name and address of the nearest Authorized Beijing Soto Corporation Dealers, please contact:
Huguzhuang, Lucheng Town, Tongzhou District,
Beijing 101117, China.

For more information on this Warranty, Dealers or Service Locations, please call (86-10) 8449-1978
Visit our website: www.soto.cn

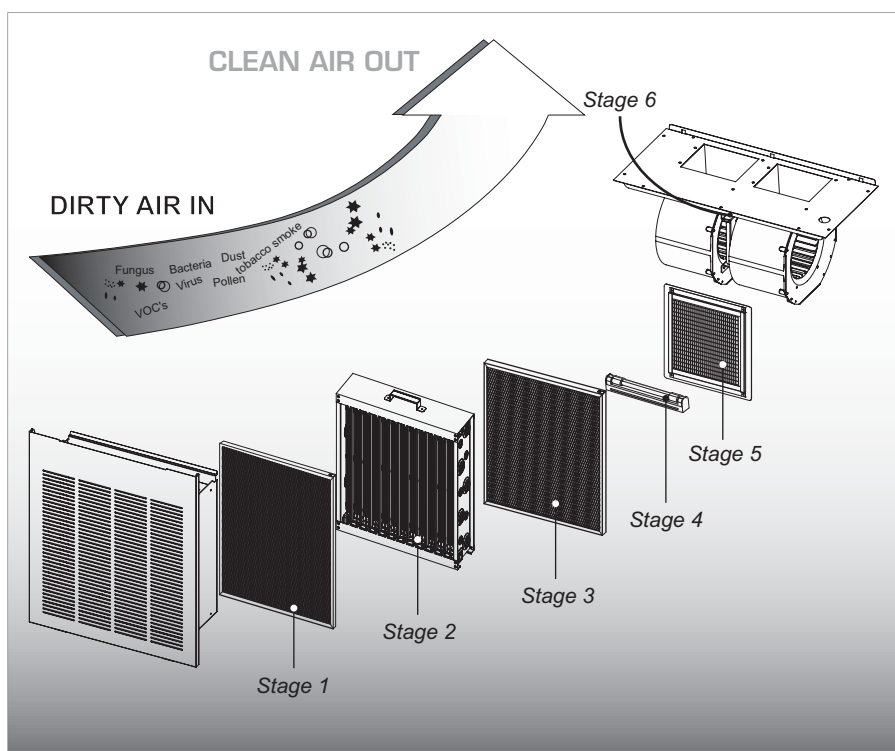
HOW IT WORKS

The air purifier functions as an air cleaner by helping to disinfect airborne microorganisms and removing particulates from the air.

The centrifugal fans of the unit draw air through the front panel (Intake) on the front of the unit. Then it passes through the Pre-filter, the electronic cell, the activated carbon filter and the UV-Photo catalytic sterilization chamber. The purified air is then released through the outlet on the top of the unit.

The air is cleansed in six stages:

1. The Pre-filter traps large dust particles.
2. The two-stage electrostatic precipitator (Electronic cell) captures airborne particles, as small as 0.01 microns. In the ionizing section of the electronic cell, billions of microscopic particles become electrically charged as they pass through the powerful electric field. The collector plates immediately attract and collect these charged dust and dirt particles.
3. The activated carbon filter adsorbs and reduces odors, chemicals and gases, removes tobacco smoke, the smell of food and other odors.
4. The UV sterilization chamber kills bacteria and viral microorganisms such as influenza, TB and Legionnaire's Disease as well as other harmful contaminants.
5. When UV light hits the photo catalytic filter, it creates e- and h+, which have an excellent effect in the decomposition of odors.
6. The unit also generates negative ions that freshens the room air.



Stage 1	Stage 4
Pre-filter	UV-C Germicidal Lamp
Stage 2	Stage 5
Electronic Cell	Photo catalyst
Stage 3	Stage 6
Activated Carbon Filter	Negative Ion Generator

FEATURES AND SPECIFICATIONS

Features

Multi-Stage Filters

The unit utilizes a two-stage electrostatic precipitator (Electronic cell) combined with a Pre-filter (For large particles), an Activated carbon filter (For odors and gases), UV germicidal light (Killing airborne pathogen), a Photo catalytic filter (Removes VOC's) and a Negative ion generator.

Automatic Function

The odor sensor can let the unit automatically select the appropriate fan speed depending on the air quality detected.

Carbon Filter, UV Lamp Replacement and Cell Cleaning Indicator Lights

The CARBON FILTER, UV LAMP indicator lights tell you the time to replace the activated carbon filter or the UV lamp. Also, the ON/CLEAN CELL indicator light tells you the time to clean the electronic cell.

Safety Micro-Switch (Interlock switch)

This air purifier is equipped with a safety interlock switch (Micro-safety switch) that will turn the unit off if the front panel is removed while the unit is running.

Easy Maintenance and Low Cost

When the electronic cell needs to be washed or the filters need to be replaced, simply open the front panel and pull out the electronic cell or old filters and put the new or clean one in. No screws, hooks or tools are required. The electronic cell captures small particles on aluminum plates that are simply rinsed off in the sink. There are no expensive filters to replace.

Specifications

Model No.	SOTO-AE/Code300T
Power Requirement	220V, 50Hz,
Rated Power	80W
Fan Motor	220V, 50Hz
Fan Speed	L-240m ³ /h, M-345m ³ /h, H-455m ³ /h
Noise Level	<55dB
Negative Ion	3x10 ⁶ pcs/cc
UV Lamp	6W
Cord Length	3m
Dimensions	H82.8cmxW47.8cmxD23.2cm
Weight	27.7kg

Standby Power

In order to operate the electrical circuits while the power plug is inserted in the wall outlet, this product consumes about 5.0W of standby power. For energy conservation, unplug the power cord when the unit is not in use.

IMPORTANT SAFETY PRECAUTIONS

When using electrical appliances, basic safety precautions should always be followed, including the following:

WARNING-To reduce the risk of electrical shock, fire or injury:

- Use only as described in this manual.
- Use only a 220-volt outlet with a polarized receptacle.
- The air purifier has a polarized plug (One blade is wider than the other is), this plug will fit in a polarized outlet only one way. Initially, if the plug does not fit into the outlet, reverse it. If it still does not fit, contact a qualified electrician or service person.
- Do not use the air purifier if the power cord or plug is damaged or the connection to the wall outlet is loose.
- When removing the power plug, always hold the plug and never pull by the cord. Do not handle plug or appliance with wet hands. **Electrical shock or fire from short circuit may occur.**
- Remove the power plug from the wall outlet before cleaning the unit and when not using the unit. Turn off all controls before unplugging.
- If the power cord is damaged, it must be replaced by the RespirAide authorized service or similarly qualified person.
- Do not insert fingers or foreign objects into the intake or air outlet.
- The batteries must be removed from the remote control before disposal, and the batteries must be disposed of safely.
- Keep hair, loose clothing, fingers and all parts of body away from openings and moving parts.
- Do not use the unit in an enclosed space where oxygen, flammable, explosive or toxic vapors are given off by oil base paint, paint thinner, some mothproofing substances, or in an area where flammable dust is present.**

CAUTIONS CONCERNING OPERATION

- Do not block the intake and air outlet.
- Do not use the unit near or on hot objects, such as range or where it may be exposed to steam.
- Always hold the handles on the side of the unit when moving it.**
- Holding the front panel when carrying may cause it to detach, and result in bodily harm.
- Be careful not to tip over the unit when opening the front panel. If not, it may cause bodily harm.**
- Do not operate the unit without filters.
- Do not wash or reuse the activated carbon filter.
- Do not clean outside with paint thinner or any chemicals. If so, the unit surface may become damaged or may cause fire.**

IMPORTANT SAFETY PRECAUTIONS

This manual classifies precautions into WARNINGS and CAUTIONS. Be sure to follow all precautions below: They are important for ensuring your safety.



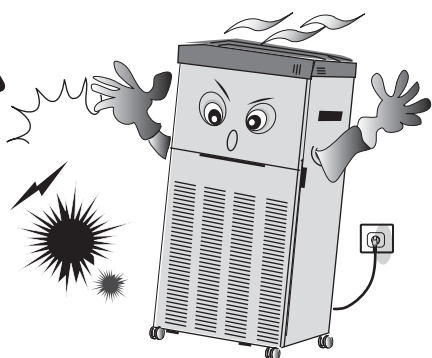
WARNING

If you do not follow these instructions exactly, the unit may cause property damage, personal injury or loss of life.

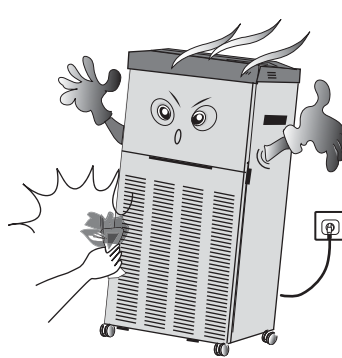


CAUTION

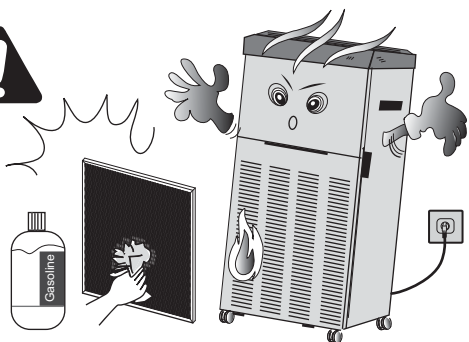
If you do not follow these instructions exactly, the unit may cause minor property damage or personal injury.



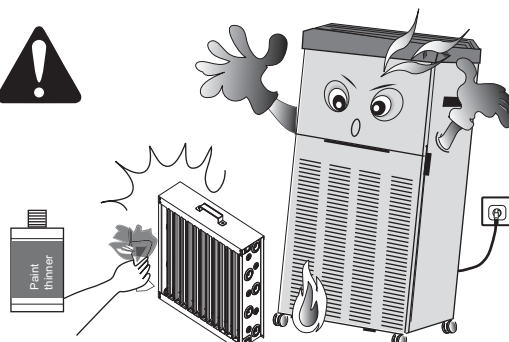
- This unit can not be used in atmosphere containing explosive dust, gas or in an area where flammable substances are present. **If so, it results in explosion or fire!**



- DO NOT cleanse the unit or any parts (e.g. pre-filter, electronic cell or activated carbon filter etc.) with alcohol, gasoline, paint thinner or other flammable substances. **It may cause fire!**

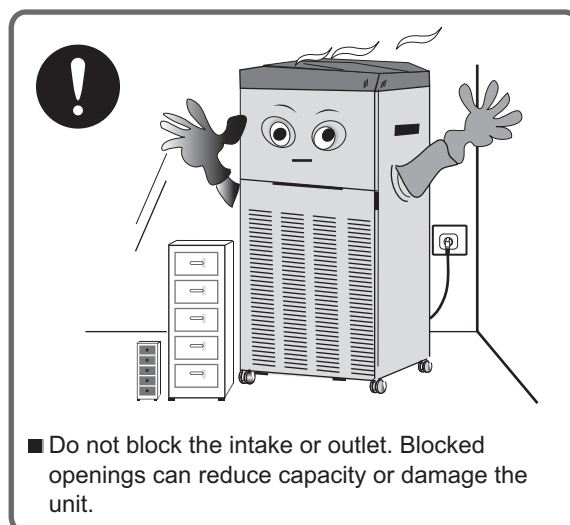
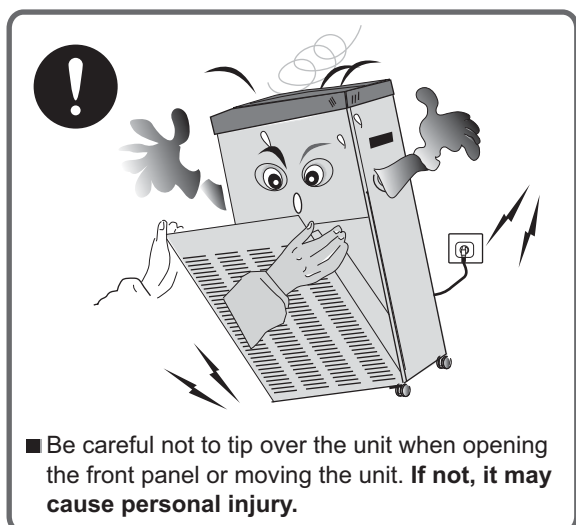
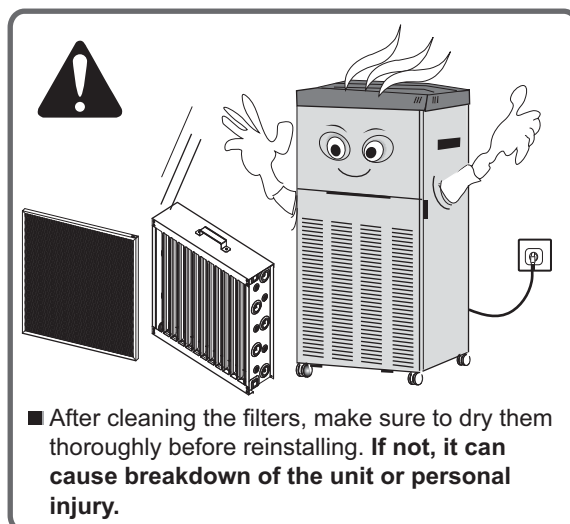
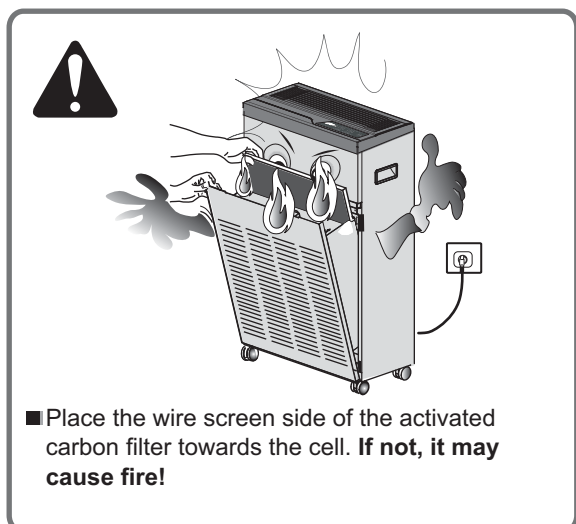
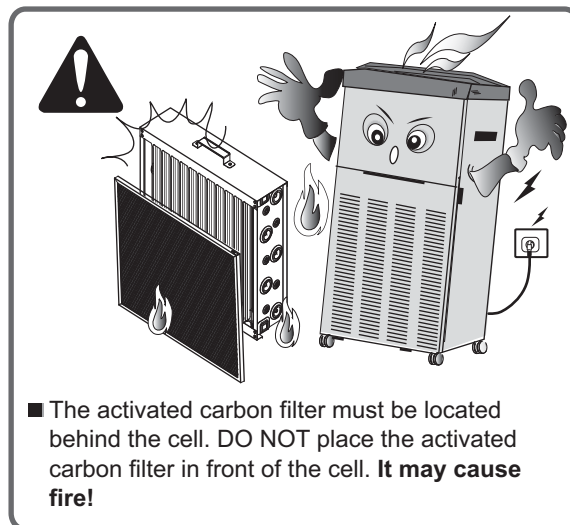
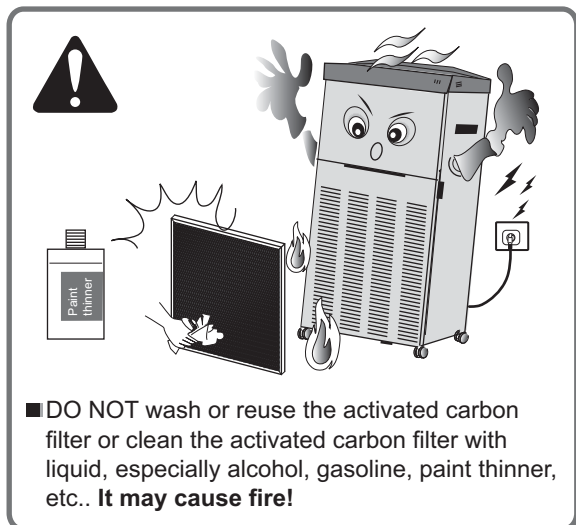


- After cleaning the Pre-filter, it is very important to dry it completely before placing it back in the unit. DO NOT clean Pre-filter with flammable substances (Alcohol, gasoline, paint thinner, etc.). **It may cause fire!**



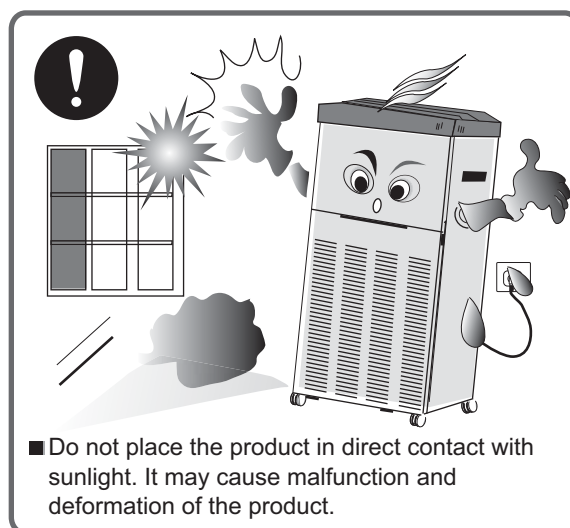
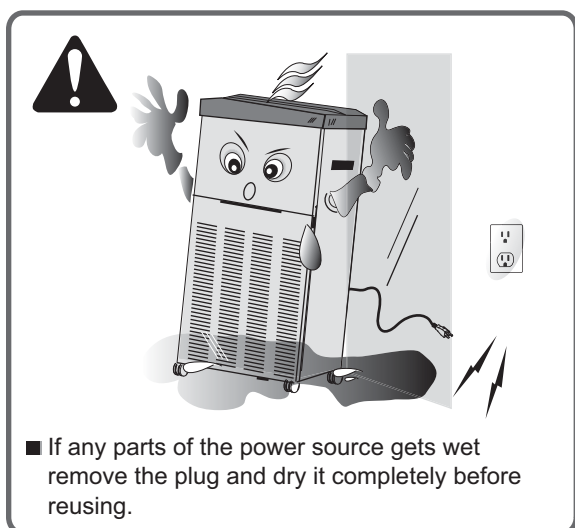
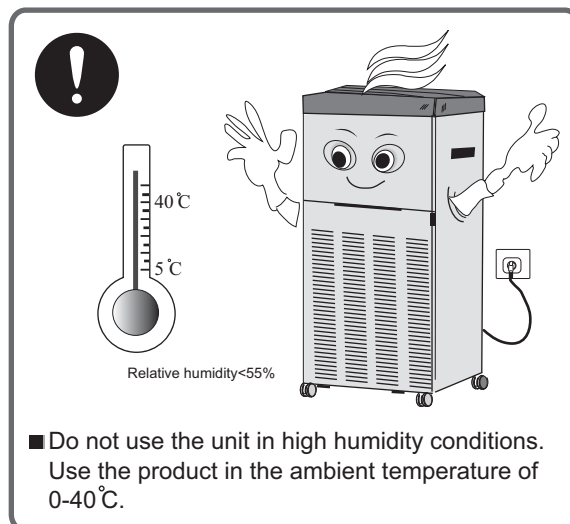
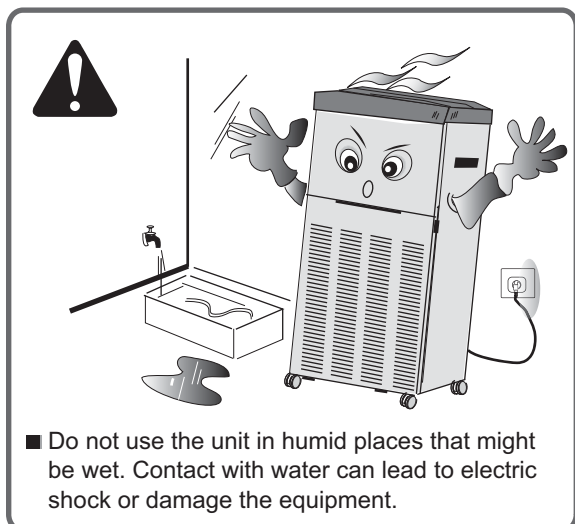
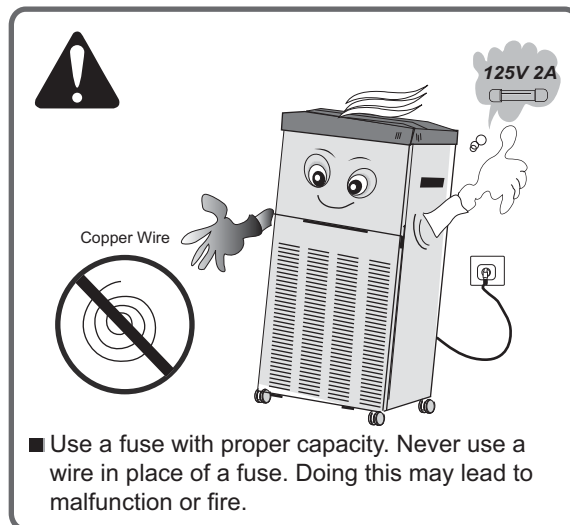
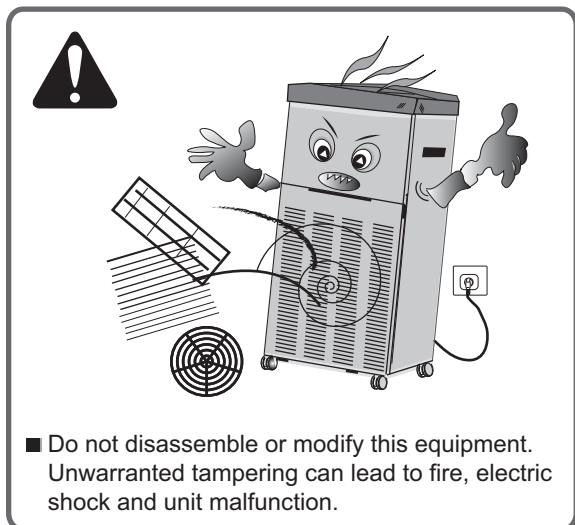
- DO NOT clean the cell with alcohol, gasoline, paint thinner, etc. **It may cause fire!**

IMPORTANT SAFETY PRECAUTIONS



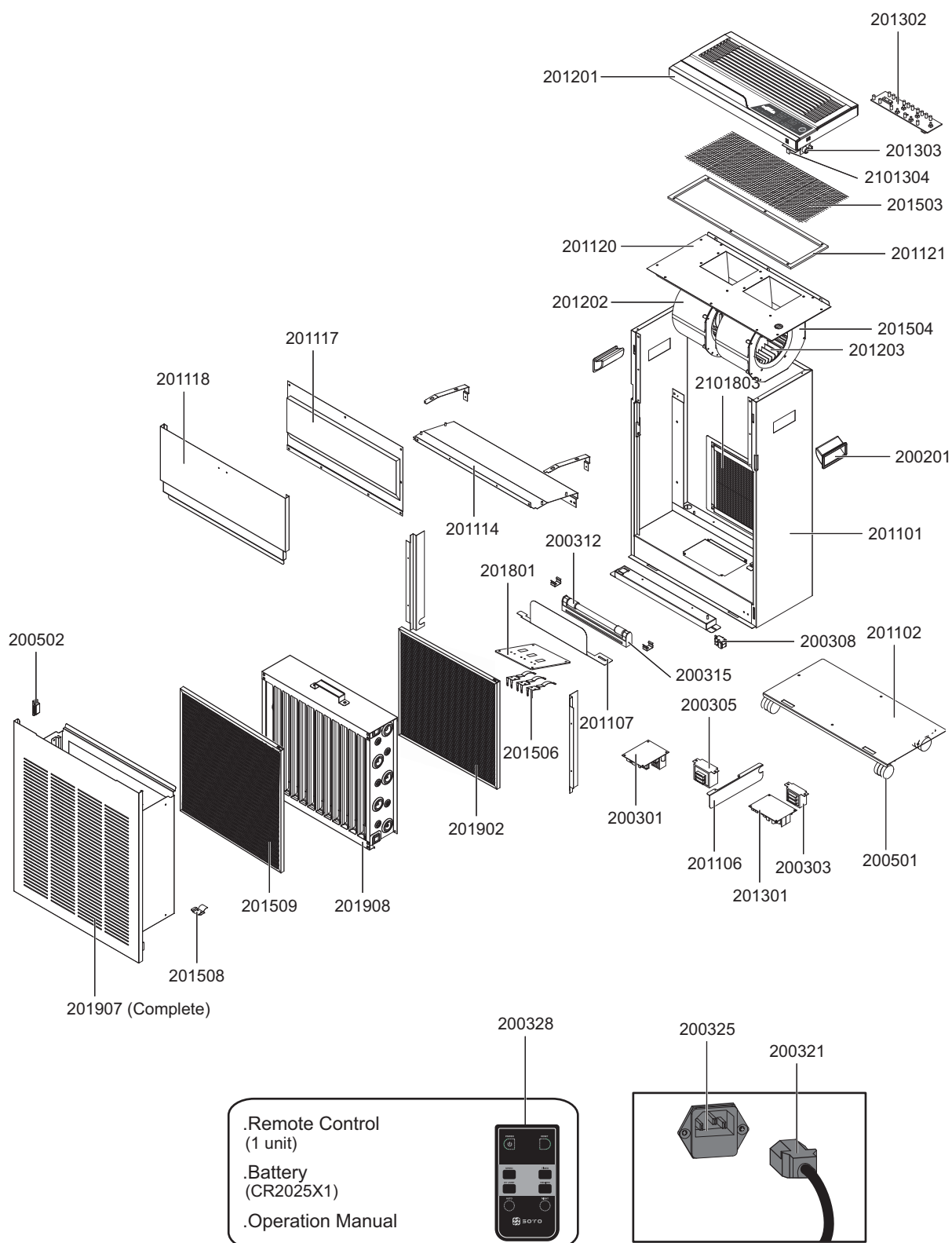
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IMPORTANT SAFETY PRECAUTIONS



PART NAMES AND DESCRIPTION

■ Main Unit



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■ Part Numbers and Names (R3)

201201 Plastic top cover	201506 Unit power contact plate
201302 Display circuit board	201908 Electronic cell (Complete)
201303 Odor sensor	201912 Activated carbon filter (Complete)
201304 Remote receiver	201509 Pre-filter
201503 Outlet screen	201508 Front panel ground clip
201121 Screen metal frame	201907 Front panel (Complete)
201120 Fan motor top plate	200502 Magnetic catcher
201202 Fan housing	201801 Unit epoxy resin board
201504 Fan motor side plate	201803 Photo catalyst
201203 Fan blade	201114 Fan motor bottom plate
200201 Unit Handle	201117 Fan motor front plate
201101 Unit housing	201118 Unit upper panel
201102 Unit bottom plate	200328 Remote control
200501 Caster	200321 Electrical power cord
200303 Main circuit board transformer	200325 Power cord input socket
201301 Main circuit board	
201106 Circuit board protector	
200301 Power supply	
200305 Power supply transformer	
200308 Interlock switch	
200312 UV lamp	
200315 UV lamp holder & ballast	
201107 UV light blocker	

BEFORE OPERATION

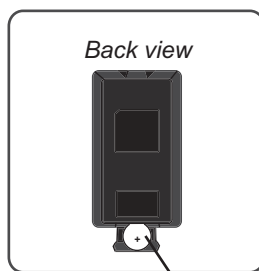
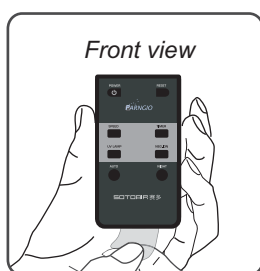
■ Remote Control Setup

Preparing the remote control

The battery is already set in the remote control, pull out the clear sheet from the battery cover before using.

How to use the remote control

- a) Point the transmitter of the remote control towards the receiver of the main unit. If an obstruction to the signal exists, the remote control will not operate.
- b) The distance from which the remote control can transmit is approximately 19 feet (6m).



CR2025 Battery

Battery Information

1. Open the cover on the rear of the remote control towards the arrow.
2. Replace the battery with CR2025 battery. Be sure to set the battery with the (+) side up.
3. Close the cover to its original position.
4. The battery for this remote control is for initial use only. Change the battery when necessary.
5. When not using the unit or remote control for an extended period, remove the battery.
6. Store the battery where babies and children cannot reach them. If the battery is swallowed contact a doctor immediately.
7. When discarding battery, cover the terminals of the battery with tape. If mixed with other metal or batteries, heat, explosion or combustion may occur.
8. Bring the battery to a nearby electronics store, watch store or camera store to recycle them.

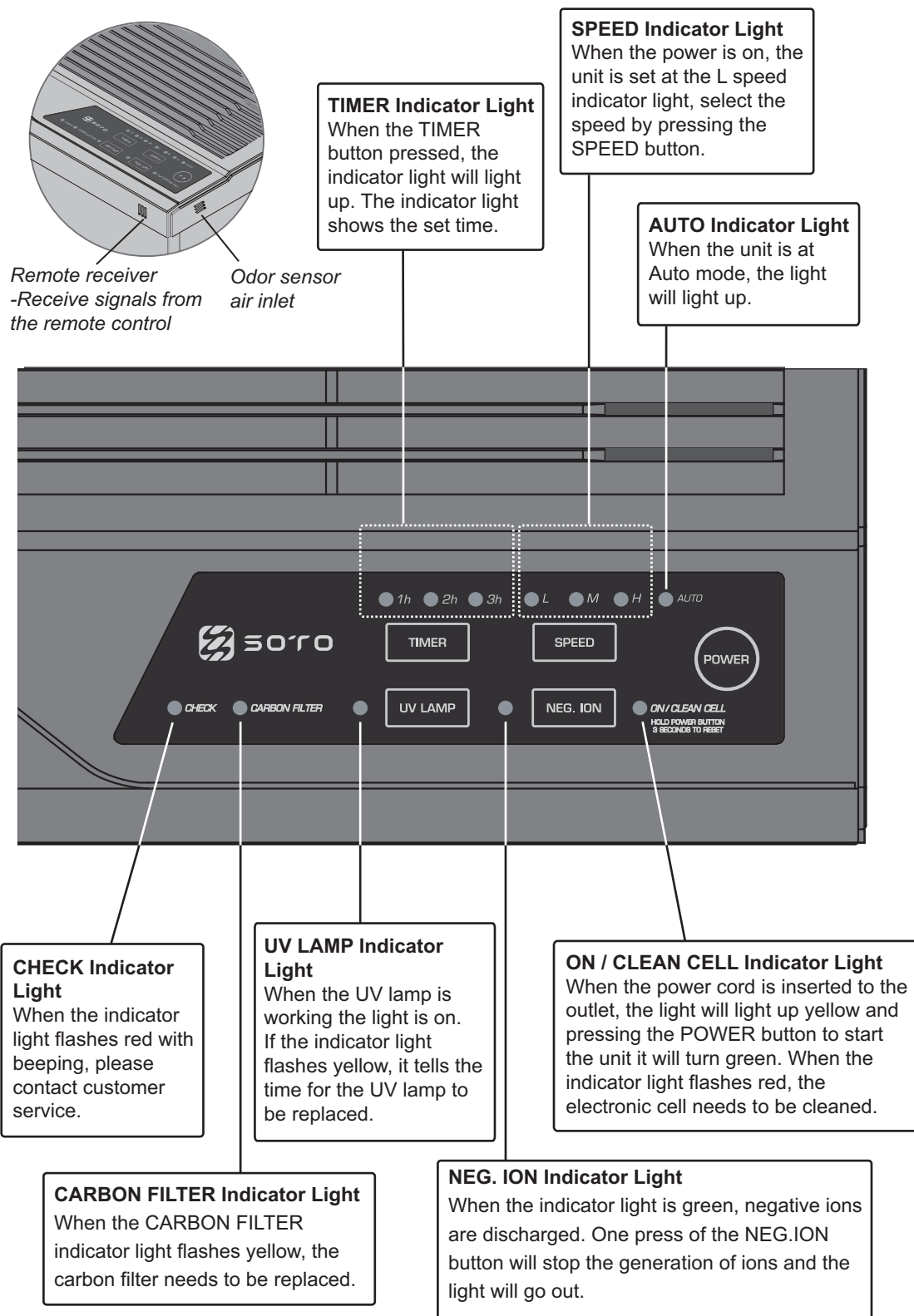
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Remote Control

1. Do not drop or place the remote control in water. (Damage may occur.)
2. Do not press the remote control buttons with sharp objects. (Damage may occur.)
3. The remote's signal may not be received properly if fluorescent lamps (Such as inverter fluorescent lamps) are in the same room.
4. Operate with the remote control facing the main unit receiver.
5. The signal range is about 19 feet (6m).
6. Make sure there are no objects blocking the path of the signal.
7. Avoid dropping or damaging the remote control.
8. Do not use it in high humidity conditions or in direct sunlight or near a heat source.

OPERATION

■ Display Indicator Lights



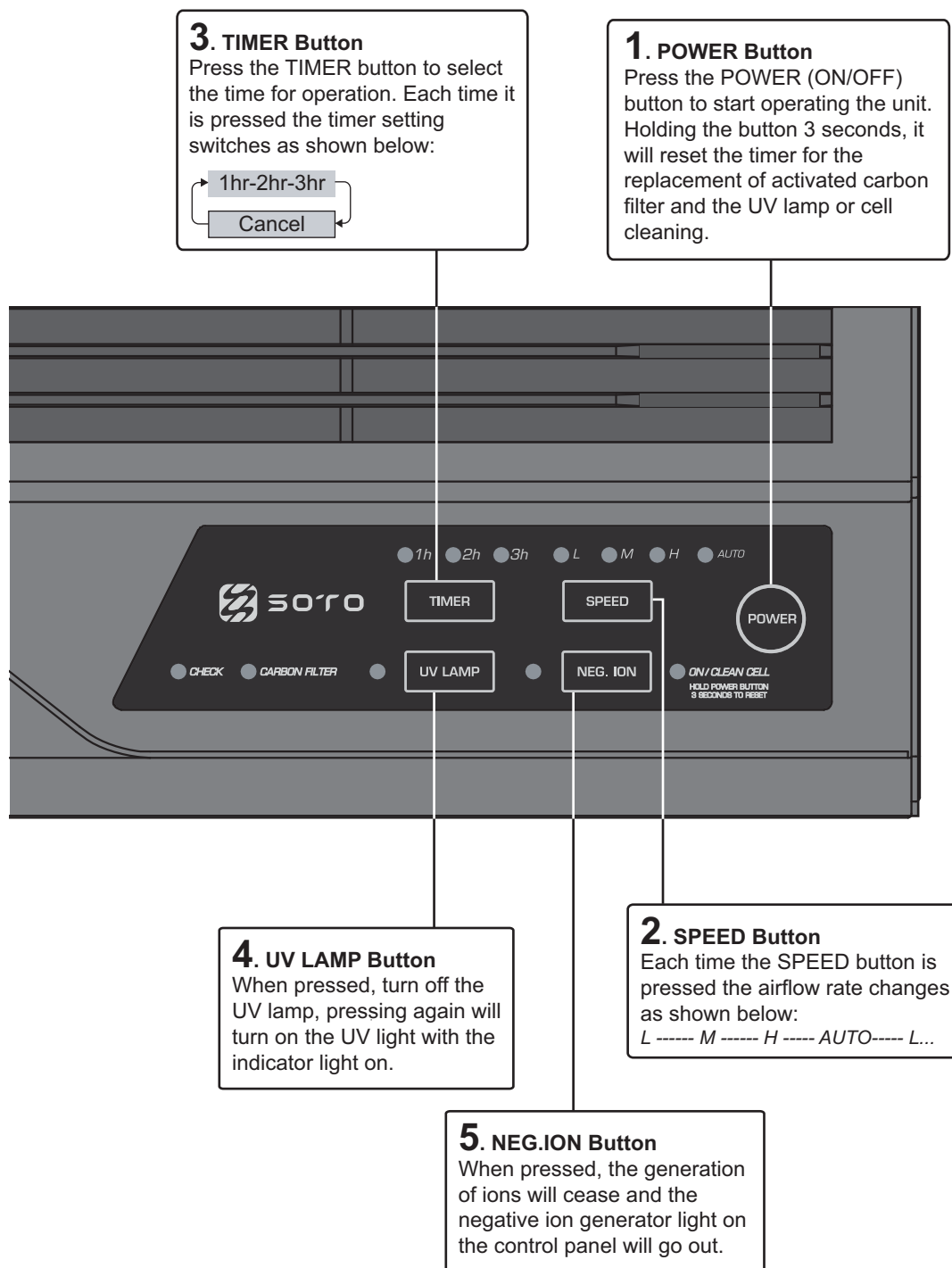
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OPERATION

■ Main Unit Operation

Connect the Power

When the power plug is inserted into the wall outlet, all the indicators on the display panel will light up for 2 seconds. (As shown in the diagram below)



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OPERATION

■ Remote Control Operation

POWER (ON/OFF) Button

The unit will start operating when the POWER button is pressed. Pressing the button again will stop operation.

SPEED Button

The fan speed can be switched among Low, Medium and High settings.

UV LAMP Button

When pressed, turn off the UV lamp.

AUTO Button

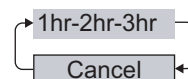
At Auto mode, the fan speed is automatically switched (H, M, L) depending on the amount of pollution in the air.

Transmitter

TIMER Button

The set time switches every time when the button is pressed as shown below.

**The indicator light shows the set time.



NEG.ION Button

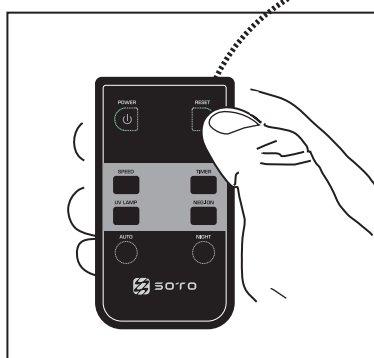
When pressed, the generation of ions will cease and the negative ion generator light on the control panel will go out.

NIGHT Button

When pressed, all the indicators will go out except the green ON/CLEAN CELL light on the control panel.

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RESET Button



After the replacement of activated carbon filter or the UV lamp, make sure to press RESET button 3 times to reset the timer.

After cleaning the electronic cell, press the RESET button 3 times to reset the cell cleaning time.

Note: Before pressing the RESET button, be sure the unit is plugged in.

CARE AND MAINTENANCE



WARNING

Cleaning the unit while it is plugged in may result electric shock, electric spark and serious injury. Unplug the unit before cleaning or maintenance!

To maintain optimum performance of this air purifier, please clean the unit including the Pre-filter and electronic cell periodically. **When cleaning the unit, be sure to unplug the power cord, and never handle the plug with wet hands. If so, electrical shock and bodily injury may occur as a result.**

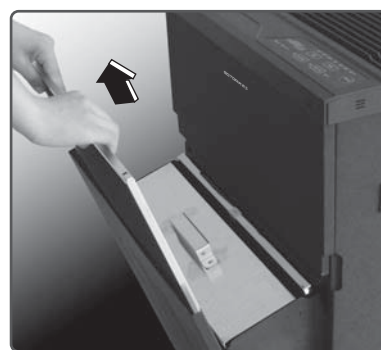
Main Unit

To prevent dirt or stains on the main unit, clean as often as necessary. If stains are allowed to remain, they may become difficult to remove. Wipe with a dry, soft cloth for stubborn stains or dirt, use a soft cloth dampened with warm water. Do not use **volatile fluids, Benzene, paint thinner, polishing powder**, this may damage the surface. Do not use detergents, detergent ingredients may damage the unit. Keep the unit away from water.

Cleaning the Pre-filter

To assure optimum performance the Pre-filter should be cleaned regularly-every one to two weeks. Washing frequency will vary depending on the number of family members, pets, activities (such as cooking or woodworking) and smoking habits. Use the wash reminder schedule in this manual.

1. **Stop the operation and unplug the unit.**
2. Hold the front panel upper portion (Left and right side) and pull it toward you.
3. Pull the Pre-filter straight up and out of the front panel.
4. After using a vacuum cleaner to remove any dust, clean with water. If it is very dirty, use a soft brush or a neutral cleaner to clean then dry completely before placing it back into the unit.
5. Place the Pre-filter back into the front panel by sliding straight down into the slots.



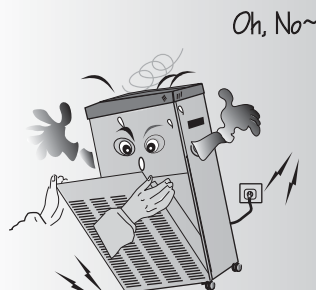
Removing the Pre-filter

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WARNING

1. DO NOT clean the Pre-filter with flammable substances (**Alcohol, gasoline, paint thinner, etc.**). **It may cause fire!**
2. After cleaning the Pre-filter, it is very important to dry it completely before placing it back in the unit.
3. During maintenance, be careful not to tip over the unit. It may cause personal injury.



Be careful not to tip over the unit when moving it.

CARE AND MAINTENANCE

Cleaning the Electronic Cell

Remove the electronic cell

1. **Stop the operation and unplug the unit.**
2. Please waiting **10** seconds before opening the front panel.
3. Pull the cell straight up and out of the front panel.

How to clean the electronic cell

1. To assure optimum performance the cell should be cleaned every one to two months.
2. Use a large enough container, such as a laundry tub or trash container. Dissolve detergent in warm water to cover the cell. After the detergent has completely dissolved, place the cell in the container. Allow the cell to soak for 15~30 minutes and rinse with clean water. Tough residue such as tar from tobacco smoke may need longer soaking.
3. After cleaning, make sure to rinse detergent residue thoroughly out of the ceramic insulators of the cell. Dry the cell thoroughly with heat gun before reinstalling.



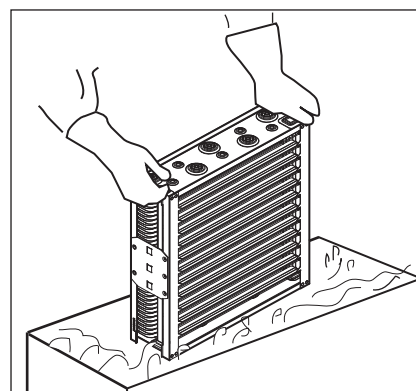
Removing the cell



WARNING

1. DO NOT clean the cell with **alcohol, gasoline, paint thinner or other flammable substances. It may cause fire!**
2. DO NOT reinstall the cell until it is completely dry. If the CHECK light on the control panel flashes red, then the cell may still be wet.
3. Be sure there is no detergent residue around the cell ceramic insulators, especially around the square shape ceramic insulators.
4. Slide in the cell so the airflow arrow points toward the machine.

Note: If the ON/CLEAN CELL indicator lights flashes red, it is the time to clean the cell. After cleaning the cell, hold the POWER button on the control panel 3 seconds or press the RESET button on the remote control 3 times to reset the timer.



Cleaning the cell

ENGLISH

Replacing the Activated Carbon Filter

When the CARBON FILTER indicator light on the control panel flashes yellow, the activated carbon filter needs to be replaced.

1. **Stop the operation and unplug the unit.**
2. Please waiting **10** seconds before opening the front panel.
3. Remove the old activated carbon filter and insert new one.

Note: After replacing the activated carbon filter, press the RESET button on the remote control 3 times or hold the POWER button on the control panel 3 seconds to reset the filter timer (See page E-17, E-20 of this manual).



Replacing the activated carbon filter

CARE AND MAINTENANCE

IMPORTANT NOTE:

- A. Remove plastic packaging from the activated carbon filter before operation
(The activated carbon filter is located behind the electronic cell).
- B. DO NOT clean the activated carbon filter with liquid, especially **alcohol, gasoline, paint thinner, etc. It may cause fire!**
- C. DO NOT try to place the activated carbon filter in front of the cell!
It may cause fire!
- D. The SCREEN side of the activated carbon filter should face the cell.

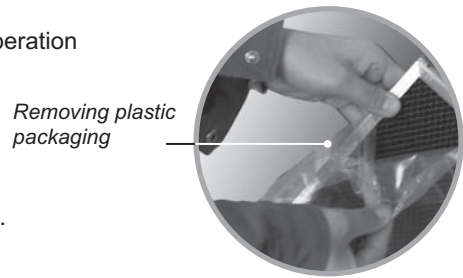
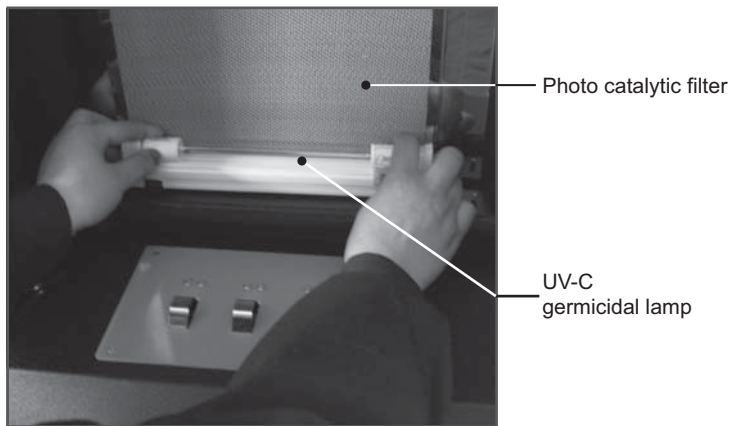


Photo catalytic Filter and UV Lamp

- 1. Photo catalytic filter is permanent, never needs replacing. When there is dust on it, clean the dust off using a vacuum cleaner dusting brush. Do not wash it in water.
- 2. When the UV LAMP indicator light on the control panel flashes yellow, it is time to replace the UV lamp (UV-C germicidal lamp). After removing the UV light blocker, gently rotate the lamp a quarter turn in either direction until it unlocks from the socket. Pull the pins out of the socket, one end at a time.



Replacing UV lamp

CAUTION:

Germicidal Light Radiation Hazard!

Never look directly at UV lamp or place face directly on outlet grill. Direct exposure to germicidal light can cause temporary or chronic damage to your eyesight, or even blindness. Always unplug the unit before cleaning, servicing or replacing the UV lamp.

ENGLISH

Note: After the replacement of activated carbon filter or UV lamp, be sure to press the RESET button on the remote control 3 times or hold the POWER button on the control panel 3 seconds to reset the timer. Once the RESET button have been activated, you will hear a beep sound that means the unit has been reset and the CARBON FILTER , the UV LAMP or the ON/CLEAN CELL indicator lights will stop flashing.



Helpful Hints

After replacing the activated carbon filter or the UV lamp, hold the POWER button 3 seconds to reset the time for the activated carbon filter or the UV lamp.

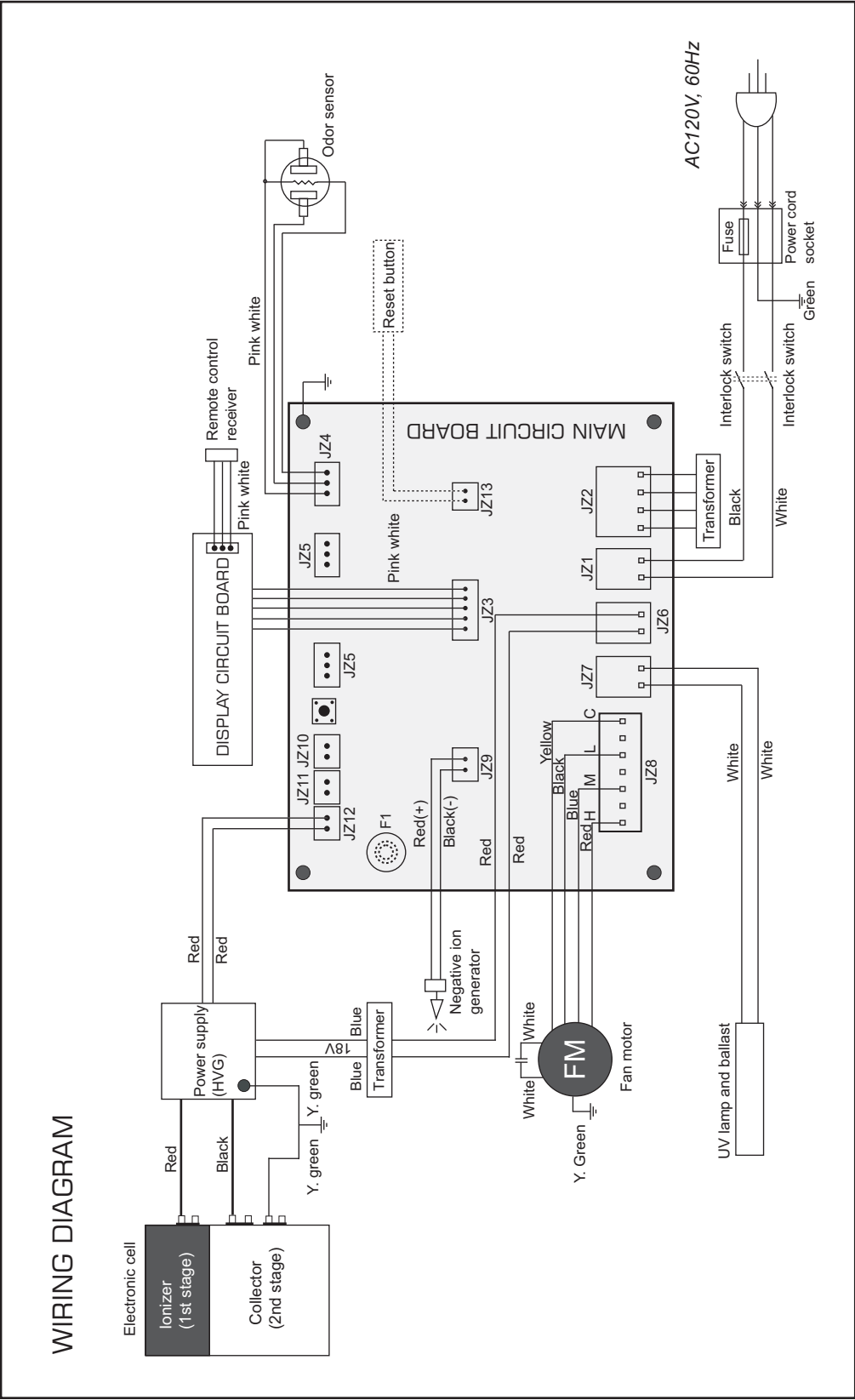
After cleaning the electronic cell, hold the POWER button 3 seconds to reset the time for cell cleaning.

TROUBLESHOOTING

Service problems that appear to be major can often be solved easily. You can be your own troubleshooter by reviewing the following guide. All other servicing should be done by a SOTO authorized service center.

CASE	WHAT TO CHECK	MEASURE
The system does not operate at all	Power failure?	Check other electrical appliances.
	Power plug disconnected?	Make sure to insert the plug.
	The FUSE out of order?	Replace the FUSE with new one.
	Front panel open or interlock switch failure?	The unit does not operate when the front panel is detached. Install properly. Check interlock switch.
	Is the CHECK light flashing?	The cell may be wet after cleaning. Dry it thoroughly. If not, call the Customer Service.
When functions do not work	There is too much dust on the Pre-filter, carbon filter?	Clean the filter or replace it.
	There is too much dust on the electronic cell?	Wash it and dry completely before installing it.
	The air inlet or outlet blocked?	Get rid of foreign materials around the product.
Automatic function does not work properly	There is too much dust on the sensor?	Remove dust on the sensor.
	There is no dust on the sensor.	Call the Customer Service.
When other problems in terms of functions are found	Check the problems first and then unplug the power cord. Call the Customer Service to ask for after-sale service or make inquiries.	

WIRING DIAGRAM



SERVICE REMINDER SCHEDULE

■ Pre-filter Wash Reminder

Year	<i>J</i>	<i>F</i>	<i>M</i>	<i>A</i>	<i>M</i>	<i>J</i>	<i>J</i>	<i>A</i>	<i>S</i>	<i>O</i>	<i>N</i>	<i>D</i>

Memo:

■ Electronic Cell Wash Reminder

Year	<i>J</i>	<i>F</i>	<i>M</i>	<i>A</i>	<i>M</i>	<i>J</i>	<i>J</i>	<i>A</i>	<i>S</i>	<i>O</i>	<i>N</i>	<i>D</i>

Memo:

ENGLISH



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